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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,840	12/29/2003	Po-Cheng Chen	87159200.242003	9446

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PATENT DEPARTMENT
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EXAMINER

SANTIAGO, MARICELI

ART UNIT	PAPER NUMBER
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2879

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/749,840		CHEN, PO-CHENG	
	Examiner		Art Unit	
	Mariceli Santiago		2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 1-9 and 18-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-26 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-9, drawn to processing chamber, classified in class 445, subclass 73.
- II. Claims 10-17, drawn to method of filling a plurality of discharge cells, classified in class 445, subclass 38.
- III. Claims 18-26, drawn to plasma display panel, classified in class 313, subclass 582.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process as claimed can be practiced by another and materially different apparatus or by hand, such as providing a processing chamber having means to receive and support upper and lower substrates of a plasma display panel in a sealing position, means to evacuate and subsequently fill the processing chamber with a display gas, and means to seal the upper and lower while the processing chamber is maintain in such gaseous atmosphere.

Inventions II and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process, such as providing an exhaust opening, in at least one of the substrates, designed to received and

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support a glass plug which is eventually melted to seal the opening without leaving an unwanted protrusion over the opening.

Inventions I and III are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a materially different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case the product as claimed can be made by another and materially different apparatus, such as a furnace provided with positioning means to disposed a glass plug over an exhaust opening, located in at least one of the substrates, designed to received and support the glass plug, and heating means to melt the glass plug within the opening and seal it without leaving an unwanted protrusion over the opening.

Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, and because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

During a telephone conversation with William D. McSpadden on March 13, 2006 a provisional election was made with traverse to prosecute the invention of Group II, claims 10-17. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-9 and 18-26 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

Claim 10 is objected to because of the following informalities:

Claim 10 recites the limitation "placing the plasma display panel assembly between the base and distribution plate", the recitation should read "placing the plasma display panel assembly between a base and a distribution plate" to provide proper antecedent basis for the claimed plates. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10, 11, 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Taniguchi (JP 2002-042657).

Regarding claim 10, Taniguchi discloses a method of filling a plurality of display cells of a plasma display panel with a gaseous mixture, the method comprising placing a plasma display panel assembly in an inner cavity (6l) of a processing chamber (Fig. 4), filling the inner cavity of the processing chamber with the gaseous mixture (4a), sealing the plasma display panel assembly inside the inner cavity of the processing chamber (Fig. 6), and removing the plasma display panel assembly from the inner cavity of the processing chamber.

Regarding claim 11, Taniguchi discloses a method wherein placing the plasma display panel in the inner cavity of the processing chamber further comprises placing the plasma display panel assembly between a base (6b) and top (6d) plates, coupling the base plate and

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the top plate using a first sealing element (6e) to form the inner cavity of the processing chamber, and sealing the inner cavity between the base and top plates.

Regarding claim 16, Taniguchi discloses a method further comprising substantially evacuating gaseous impurities from the plasma display panel assembly before filling the inner cavity of the processing chamber with the gaseous mixture.

Regarding claim 17, Taniguchi discloses a method wherein the gaseous mixture comprises at least one inert gas selected from the group consisting of Xenon (Xe), Neon (Ne), and Helium (He), (Paragraph [0003]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taniguchi (JP 2002-042657).

Regarding claims 12 and 13, Taniguchi discloses a sealing element provided between the base and top plates and heating the processing chamber to obtain a sealing temperature. Taniguchi fails to exemplify the sealing element being an O-ring or comprising a crystallizing sealing material and the inner cavity being sealed by heating the processing chamber to a first sealing temperature. One skilled in the art would reasonable contemplate the selection of a known material on the basis of its suitability for the intended use as a matter of obvious design choice. It is noted that applicant's specific crystallizing sealing material does not solve any of the stated problems or yield any unexpected results that in not within the scope of the teaching

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applied. Furthermore, one skilled in the art would reasonable expect applicant's invention to perform equally well with the sealing material disclosed by Taniguchi or the claimed O-ring or crystallizing material since each of the sealing materials perform the same function of sealing the base and top plates to provide a air-tight processing chamber. In regards to the limitation of heating the processing chamber to a first sealing temperature, Taniguchi acknowledges heating the entire processing chamber to provide a desired temperature to obtain the sealing, accordingly, one skilled in the art would reasonable contemplate optimization of the processing chamber's temperature to a first sealing temperature sufficient to seal the processing chamber into an air-tight environment. Accordingly, it would have been an obvious matter of design engineering to modify the method of Taniguchi to obtain the invention as specified in claims 12 and/or 13.

Regarding claim 14, Taniguchi discloses a method wherein a front substrate and a rear substrate of the plasma display panel assembly are coupled together by a second sealing element (3), the second sealing element is configured to hermetically seal the front and rear substrates upon heating of the processing chamber. Taniguchi is silent in regards to the limitation of heating of the processing chamber to a second sealing temperature, and the second sealing temperature is greater than the first sealing temperature. One skilled in the art would reasonable contemplate optimization of the processing chamber's temperature to a second sealing temperature sufficient to seal the front substrate and a rear substrate of the plasma display panel assembly at a temperature as a matter of design engineering. It is noted that applicant's specific temperature range does not solve any of the stated problems or yield any unexpected results that in not within the scope of the teaching applied. Thus, it would have been obvious at the time the invention was made to a person having ordinary skills in the art to

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incorporate second sealing temperature is greater than the first sealing temperature as a matter of design engineering.

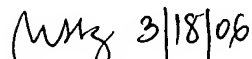
Regarding claim 15, Taniguchi discloses a method wherein the gaseous mixture flows into a plurality of display cells formed between the front and rear substrates of the plasma display panel assembly via lateral sides of the plasma display panel assembly.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariceli Santiago whose telephone number is (571) 272-2464. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Mariceli Santiago
Primary Examiner
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